

HENDEY

1870-1920

BASEMENT STORAGE

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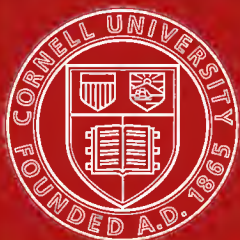
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The Hendey Machine Company, 1870-1920; a



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TO THE MEN WHO BUILD OUR
MACHINES AND IN THE BUILD-
ING STRIVE FOR PERFECTION;
TO THE FRIENDS WHO USE OUR
MACHINES AND IN THE USING
REALIZE OUR AIMS, THIS LITTLE
BOOK IS CORDIALLY DEDICATED

THE HENDEY MACHINE COMPANY

1870-1920

A BRIEF RECORD OF
A CHARTED COURSE

TORRINGTON, CONNECTICUT
PRIVATELY PUBLISHED
MCMXXII

INTRODUCTORY

A great American, twice President of the Republic, once said that the really useful citizen or group is that whose contribution to progress is the result of *original* research, effort or design.

In the industrial universe there are names, both past and present, which will ever be synonymous with all that makes for originality, precision and perfection in the various arts and manufactures. So to the machine tool world in the name Hendey, one almost unconsciously pictures the rugged, courageous pioneer whose fine faith and high standards actually constituted the corner stone of success of The Hendey Machine Company's products of today.

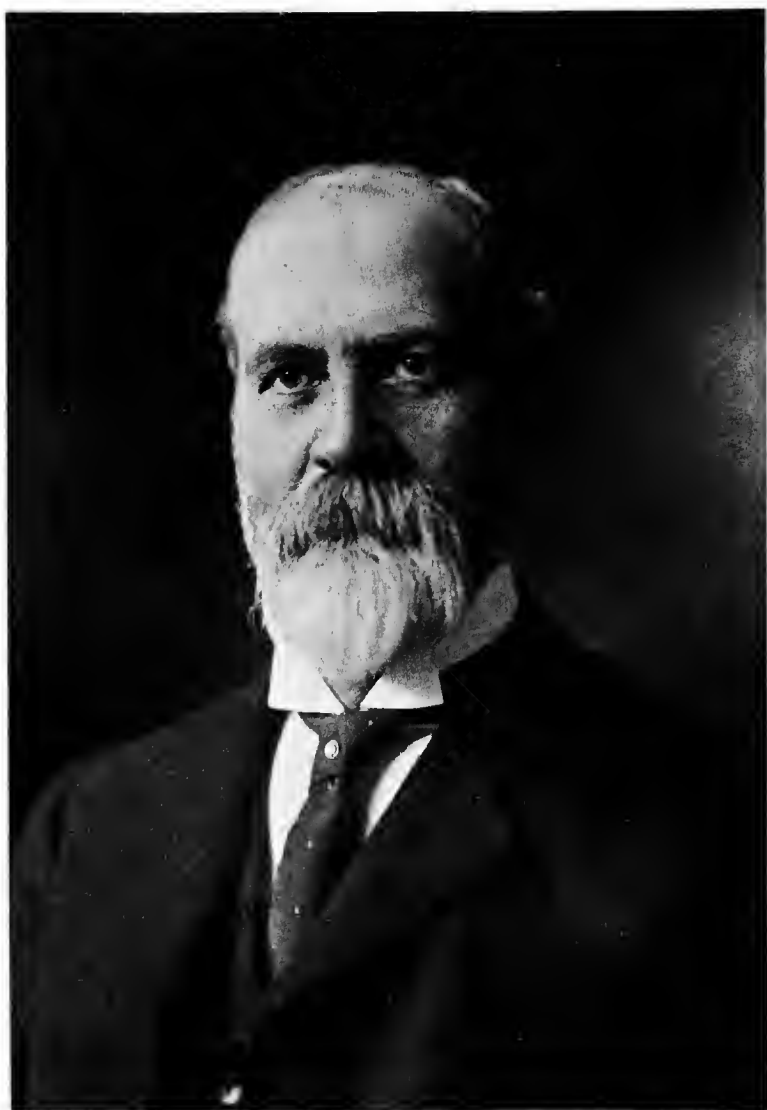
There are those industries, the very nature of whose product is such as to make possible its perfection in a comparatively brief period. It is equally true there are products as in this business where precision and accuracy are attained only through generations of consistent and conscientious application and where the most minute deviation is a cumulative error. Too frequently these facts are obscured by the amenities and bartering in selling and buying.

So often in this kind of story the casual reader passing upon its salient facts or features hastens to classify it under the all too familiar advertising triumvirate—good, bad or indifferent. To those of us who are associated and privileged to carry on in The Hendey Machine Company, there is and will be an individual obligation, inspiring, tried and worth the while—building upon the ideals of the founder, Henry J. Hendey.

It is with this thought we have caused to be printed for distribution among our friends at home and abroad, a limited edition of this little book, covering a half century of consistent effort to build Hendey tools as Mr. Hendey intended they should be built and it is our hope the sketch will be accepted, particularly in this period, in the spirit it is issued—the spirit of business sincerity.

TORRINGTON, CONNECTICUT

September, 1921



HENRY J. HENDEY
THE FOUNDER

THE FOUNDER

The great university of opportunity is ever open to the youth with the instinctive determination to achieve; it matters not how remote his origin, how humble his beginnings.

This type familiarly defined as "self made," while tenaciously holding to its main objective, is as constantly undergoing a process of schooling and refining, broadening in its influence, vitalizing and upbuilding in its effect.

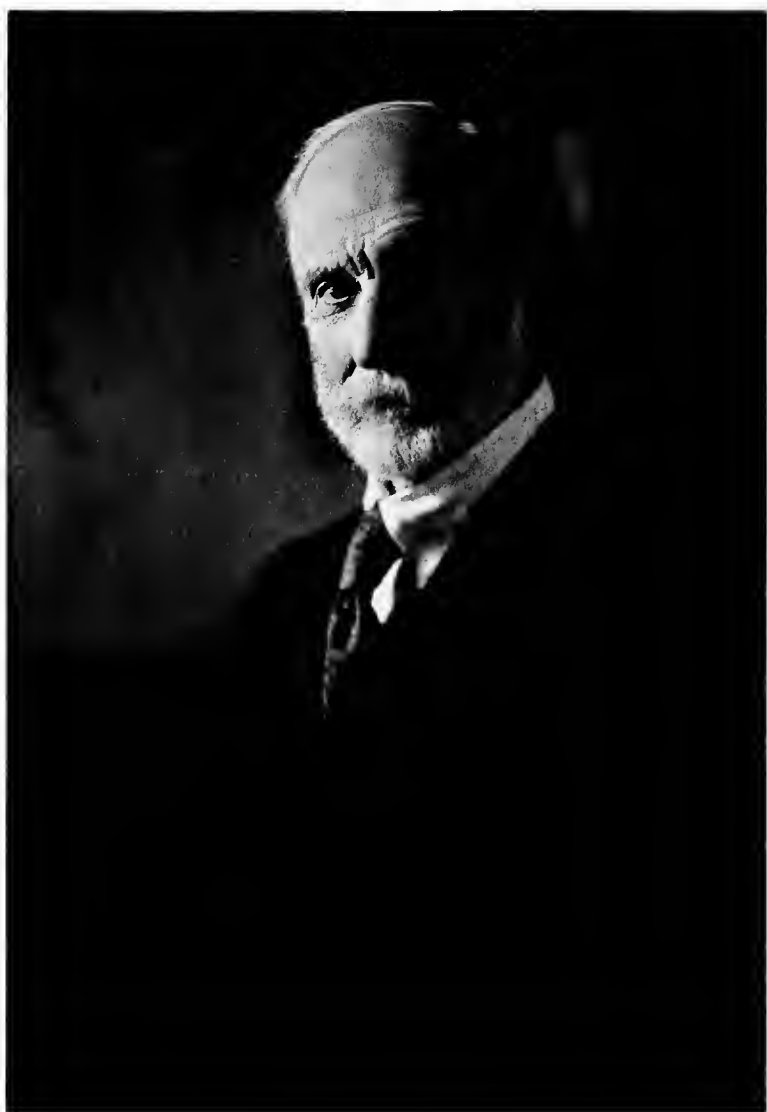
Of this school Henry John Hendey was an example. Born in 1844 in London, England, he was brought to this country at the age of four, by his parents, the family settling in Waterbury, Connecticut, where they lived until 1865, when they removed to Wolcottville, now Torrington, Connecticut, where the Founder lived continuously until his death in December, 1906. Young Hendey was educated in the public schools of Waterbury and it was there he learned his trade of machinist.

Confronted by adverse conditions, hampered by lack of money, but with a splendid faith in what the future held, his many fine qualities and sheer strength of

character asserted themselves. An unshaken courage, a steadfast determination, decision; these were his outstanding characteristics.

A disciplinarian in his business, his was the discipline which makes for organization, always justified by the result. Ready always with constructive criticism, he was as prompt in admitting his own misapprehension. Probably no quality appealed more to his associates than his sense of fairness, particularly to the men of the line.

Mr. Hendey had in life three absorbing interests—his family, his church, and his business. His family relations may not be touched upon here; his religion only as it constituted a practical and applied philosophy in his personal and business life. It was not conspicuous but modest. It meant the sharp distinction between right and wrong; a fine mixture of the practical and ideal; a standard to live and work to, a standard in which the attaining brought an innermost gratification. Such men are human templates and their influence so far reaching in the business of life that truly it is said: "Every institution is the lengthened shadow of a man."



ARTHUR HENNEY
THE ASSOCIATE

THE STORY

PARTNERSHIP

Fifty years ago, Henry J. Hendey, a journeyman toolmaker of Wolcottville, Connecticut, with the faith of the fathers and limitations of the hireling, determined to launch and navigate a proprietary machine shop business. To his younger brother Arthur, then a patternmaker in New Haven, he definitely outlined his plan and with such apparent enthusiasm that the younger Hendey immediately acquiesced in the project and the brothers became associated in a humble infant industry, with an unknown product, out of which was builded step by step, but with unvarying precept, the present Hendey Works, with a product whose reputation is standard wherever man and metal combine in turning out a finished article.

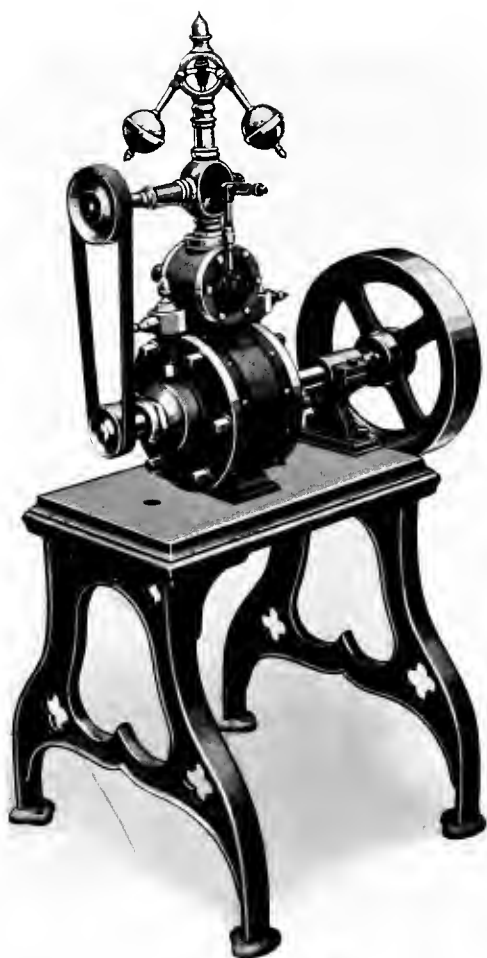
In the present period of business inactivity, there is a homely lesson in the courage and confidence of the founder of this enterprise, who, due to business depression, was at the time unemployed, but who did not hesitate to face forward, backed only by mentality and muscle and that invariable

and constant asset, an unfaltering faith in America.

Different indeed was the modest beginning from the launching of the average industrial plant of today with its finances reasonably underwritten, with its planning engineers and trained specialists. Money was tight and in the early 70's it took a clear eye and ability tried and trusted to pry it from the bank vaults and persuade the man of means to match his investment against character and ability alone.

At the outset the brothers secured working space in the machine shop of The Turner, Seymour & Judd Company, of Wolcottville, now Torrington, Connecticut, where they continued until the spring of 1871.

Just prior to this move, Henry Hendey, who had returned temporarily to his old twelve-hour per day job, and with that characteristic originality which was later to play such an important part in the destiny of The Hendey Machine Company, completed the 3 H. P. Rotary Engine here pictured and which furnished the motive power for the new plant. The work was done at



THE ORIGINAL POWER UNIT—1870

night after leaving his daily task, which paid him the then top notch machinists' wage of \$5 per day.

On a table in the engine room of the present plant, in the shadow of its great successors, this little fellow stands today, silent and inactive; but always a very forceful reminder of cherished hopes, of ambitions realized, a monument in miniature to industrial evolution.

In its inception, naturally enough the tiny shop was not flooded with orders, work came in gradually and Henry Hendey continued working part time in the local manufacturing concerns. Again the brothers' faith in the future, in their ability to meet an increasing demand for a high class product, was evidenced in their next move.

The few dollars they could gather were pooled and Arthur built a small one-story shop on land belonging to their father adjoining the family home. This little structure, the first proprietary works of Hendey Brothers, was later remodeled into a dwelling and is still standing on New Litchfield Street.

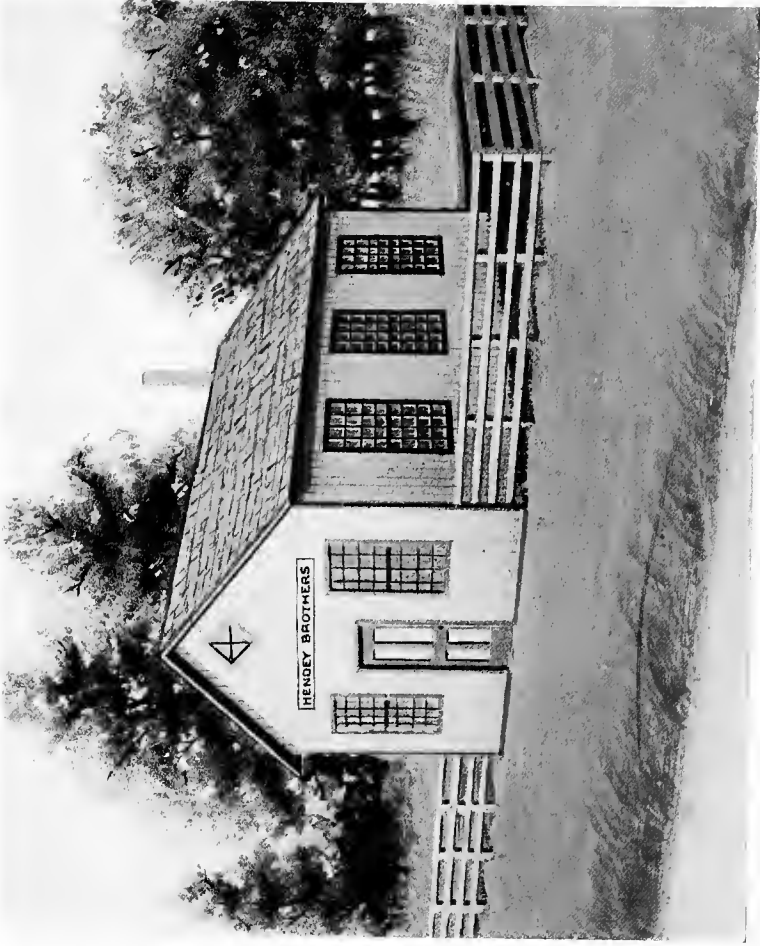
About this time a contract, a goodly

one in those days, was awarded them, for the construction of twenty wood turning lathes. The details of this premier transaction clearly indicate that even at that time the brothers were thought to be highly capable and thoroughly competent.

With an eye to financing, Henry Hendey continued working part time for others, part for the new plant, and it was deemed expedient to hire one man to assist Arthur. This was an important move and the brothers hesitated somewhat in expanding their labor nearly 50%.

The business continued in this little shop until the spring of 1872, when the amount of work seemed to justify larger quarters than were possible on the homestead and a move was made to the East Branch Spoon Shop. By this time Hendey Brothers were "hiring several men." Business was looking up, good fortune was indeed smiling.

There was at the time a demand for machines for making sewing machine needles, and they were quick to grasp the opportunity and soon became busily engaged in making miller groovers, punches, swaging



THE FIRST SHOP—1871

and various other machines, used in making these needles. Then came shoe nail machines, machinery for lamp burner parts and clocks. Special machinery was then undertaken, such as brass slitters, machines for making wire parts for pianos, for straightening and pointing wire and shaping to numerous forms, foot power jig saws, steam gauge work, glass cutters—in fact, a varied line.

Important indeed, a factor directly affecting the present Hendey product, was the dependable versatility of the brothers as evidenced by the varied line of machines which were then successfully made. It was unquestionably the concentrating later of this competent versatility upon a less diversified line, which laid the very foundation of Hendey Standards. Today the knowledge and understanding of the founder, born of instinct, grafted upon and inbred through generations of workers, is centered upon the production of standardized machines, principally the Lathe, the Shaper, and the Milling Machine. It is superfluous to dwell upon the success of such manufacturing procedure. It is apparent.

It was in the fall of 1872 that Hendey

Brothers really concluded the most difficult part of the ascent had been negotiated; ambitions were beginning to be realized; the peak was almost in sight. They decided to build a "new and commodious plant" upon the site of the present works. This was a two-story wooden building 40 x 60 feet with engine and boiler room at one end. When this shop was first occupied in 1873 the brothers had branched out as employers of labor and their pay roll carried from fifteen to twenty men, for, notwithstanding the very decided business depression and panic of that year, they were obtaining all the work they could reliably turn out. They were still working to original form and were exceptionally punctilious in even the smaller details affecting the quality of their product.



THE SECOND SHOP—1873

THE STOCK COMPANY

Orders were indeed coming their way; but money was scarce and difficult in the collecting. In 1874, therefore, in order to provide necessary financing, a joint stock company was formed with sufficient working capital to enable it to discharge all obligations and carry on the business with reasonable facility. Thus came into existence The Hendey Machine Company.

Shortly after this important mile mark in the Company's history, the shop was visited by an officer of the Russian Army, who, in his desire to obtain a small lathe, perfect in every operating detail, had called upon all the lathe makers in New England, each of whom had declined the commission. Undoubtedly then, as today, such a liberal order was designated as "fussy." The brothers, interested in any machine tool requiring precision, accepted the job.

The lathe, 15" between centers, with a 4½" swing, back geared, arranged for screw cutting, in every way a counterpart of the engine lathe of that period, was completed on time and to the perfect satisfaction of the Russian. The most important

part of this transaction was not so much in detail as in effect, for without question it was the painstaking execution of this little job which later suggested entering the lathe field and beyond peradventure the Hendey Standard Engine Lathe of today, with the design and accuracy of a fine timepiece, is the natural and legitimate progeny of this tiny $4\frac{1}{2}$ " x 15" ancestor.

Soon after the completion of the Russian midget, the brothers built four lathes with 8" swing and 4' beds, which, perhaps through their prompt disposal, the more emphasized the possibilities in this field.

It was truly unfortunate that, owing to ill health, Arthur Hendey, in the spring of 1875, was compelled to withdraw from the Company and move West. The association of the brothers had been both pleasant and productive, as their inclinations and bent were peculiarly coincident. With Arthur's retirement, his interest naturally passed to Henry J. Hendey who, continuing with the Company, made it his life's work, actively directing its affairs until his death in December, 1906.

In 1875 The Hendey Machine Company, under letters patent, commenced the manu-

facture of friction-drive planers and shapers. In the same year the Company exhibited a friction-drive shaper and iron planer and were awarded a medal of superiority by The American Institute. In 1876, at the Centennial Exposition in Philadelphia, the Company exhibited two shapers and a planer with friction-driving mechanism and were awarded a diploma and another medal of superiority. It is fair to state that awards of this nature were at that time more difficult to obtain and probably more coveted than at present.

Close upon the heels of the panic of '73 there ensued a protracted period of general depression, which historically makes interesting reading; but which in the experience was vastly trying even to those companies and individuals whose resources were reasonably unlimited. With many of the smaller concerns it was a daily struggle for existence, and an early stalwart's advice to the Romans suggesting the potency of spirit and inconstancy of the flesh, was frequently applied with truly gratifying results.

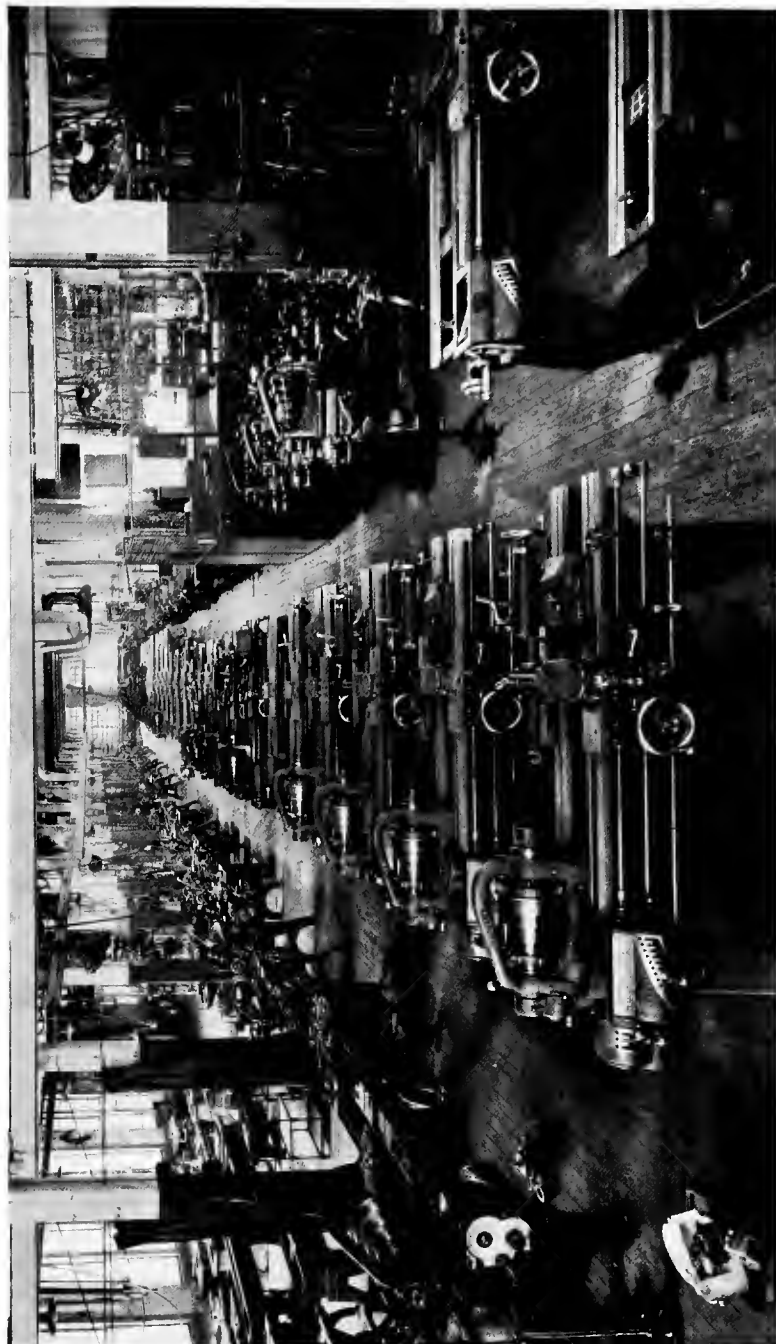
It was about this time that several of the stockholders, discouraged by prevailing conditions, disposed of their holdings and

Henry Hendey who had carried an overload since the withdrawal of Arthur, was called upon to assume added responsibility. Resolute and courageous, with his well-founded faith, he promptly surrounded himself with associates qualified to carry on in the other departments of the enterprise.

It is worthy of note in the passing, that from the inception of the business, on throughout his career, Mr. Hendey was blessed with an almost intuitive faith and a fine faculty for attracting to his organization men of ability and vision, men whose aims and ideals were largely in sympathy with his own high standards.

That the Company's sales policy and methods were at times quaintly resourceful and not wholly lacking in humor is borne out by some of the transactions. In one instance a piano was accepted in trade, in another silverware. In both cases this collateral was cautiously unloaded upon stockholders.

In the midst of this depression a very important stroke of business was consummated in a sale of fifty shapers on one order, with payment upon delivery. This



THE LATHE ASSEMBLY
PRESENT

deal from a financial viewpoint, proved a timely tonic.

In the marketing of the product there is in the following old guarantee a reflection of the confidence of the production end of the business:

“We guarantee perfect satisfaction to anyone who may purchase our machines; and if any reasonable exceptions are taken to the good performance of this machine, it may be returned to us at our expense.”

Apparently the purchaser was fully protected.

BUILDING

During the first decade of the Company's existence, between 1870 and 1880, it is an interesting fact, indicated by the old pay roll records, that there was, one year excepted, a mean or average annual gain in the plant's productive labor of 20%. Even in the panic year of '73 this gain was realized. The one year showing a curtailment was 1875. This uniform yearly gain is in itself significant, particularly so when contrasted with an averaging graph of supply and demand for the same period. It is very clearly indicative of sound policy and principles and the high standard of the product, which of a necessity more or less automatically marketed itself, for even on a comparative basis, there was in that period no such clearing house for marketing, as exists today through the medium of modern publicity and sales organizations.

In 1878 Hendey Standard was emphatically recognized by a Naval Board of Engineer Officers appointed to investigate the merits of various types of Shapers, with a view to adopting one make as standard for use throughout the United States Navy. In a two-page closely written report on the

Hendey Friction Shaper, the last paragraph is pertinent and convincing:

"We fail to discover any disadvantages, and from a conviction that it is the best Shaper known to the Board, in the market, and on account of its superiority, we recommend its general use for purposes connected with the U. S. Navy. It also occupies over one-third less space than any other Shaper known for the same range of work."

The Board's findings gave further publicity to Hendey Standard and a certain official stamp, or sanction, which was undoubtedly far-reaching and salutary in effect.

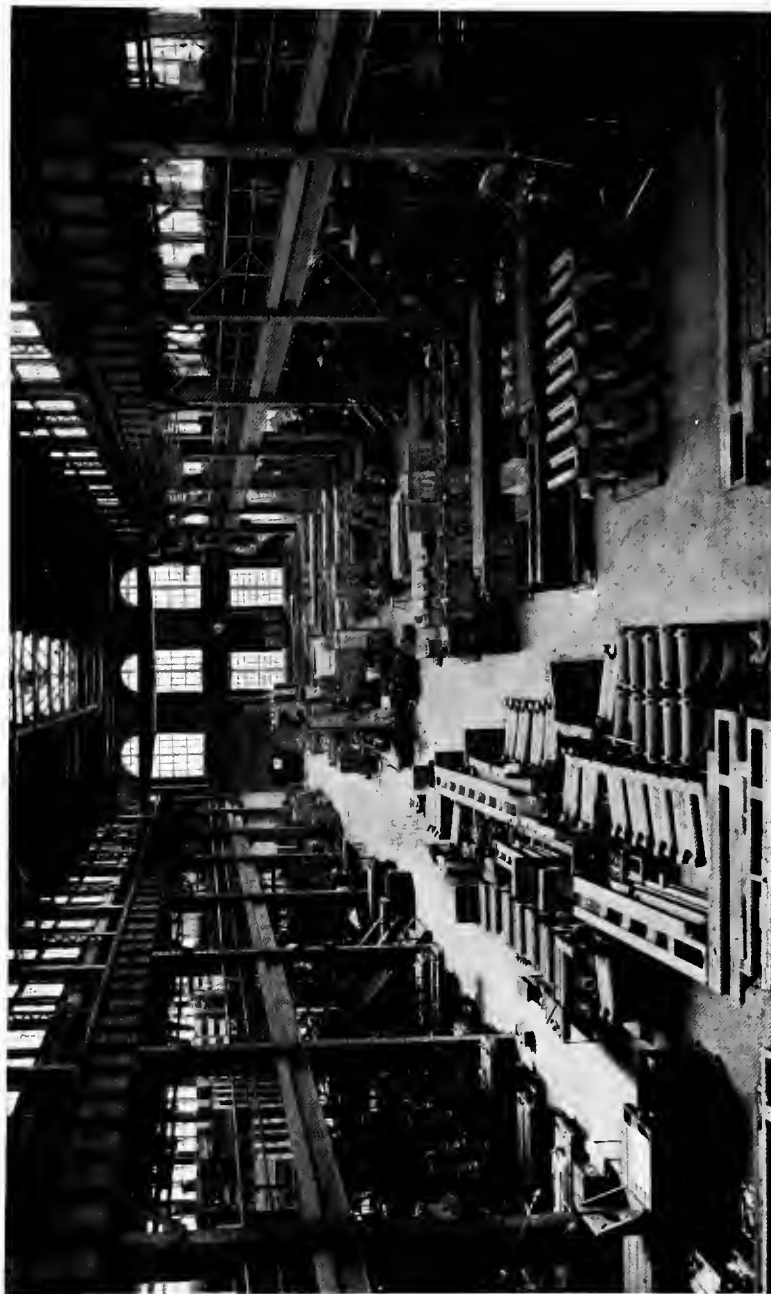
The production of the Company from inception until 1880 covered, as already stated, a varied line of machines, including a few hand Lathes, with a rather indefinite tendency towards a standard line, as indicated by a limited stock of Hand Planers, Friction and Shifting Belt Planers and Friction Shapers.

In the interim between 1873 and 1880 the plant was more than tripled in size, including a detached power plant. In 1884, contrary to prevailing practice, the Com-

pany erected its own foundry with a capacity far beyond its current requirements. This innovation was definitely prompted by the desire to supervise and control every process in the production of machine parts, thus making it possible to apply the Hendey Standard to every part of the completed machine.

By 1890 the works were fully seven times larger than the shop of 1873. In 1896 a commodious three-story brick building was added, with the full expectation that the total shop area thus obtained would look well towards future production. Only two years later it became necessary to duplicate the previous brick addition. In 1899 a new foundry was built, double the size and capacity of the original, and a new power house with full electric power equipment.

During the twenty years from 1880 to 1900 the Company's manufacturing policy was to gradually lessen its output of special work, concentrating upon the design and production of a standardized line of machines. Geared Shapers, Drill Presses and Knee Drills were added, also a few Hand and Spinning Lathes, and in 1887 there was a definite drift towards the Lathe when Semi-



THE PLANER DEPARTMENT
PRESENT

Automatic, Turning and Heavy Spinning Lathes were added to the line.

In 1890 the Engine Lathe commenced turning out Hendey history and headed the standard line. In addition to the Screw Cutting Lathe, a Turret Head Chucking Lathe and a Plain and Automatic Turret Lathe were included in the regular product.

QUICK CHANGE GEAR LATHE

The year 1892 was epoch-making in the Company's history, the most important since the foundation year, 1870, for in that year The Hendey Machine Company introduced in their Lathes the first commercially successful Quick Change Gear Box equipment and were awarded a gold medal at the Chicago Exposition. The essential advantages of this mechanism in machine tools is too well known to need further reference. From then on Lathes definitely occupied the premier position in the Company's standard line.

The making of Milling Machines was probably originally suggested by the requirements of the Manufacturers of Agricultural Implements, as in the 1894 catalog a Two-Spindle Vertical Machine was listed, designed for the milling of Mowing and Reaping Machine Guards. This tool, so far as is known, was the first continuous operating miller made for quantity production.

The last few years of the third decade in the Company's history, saw many

improvements in their machines and numerous valuable attachments were designed and produced. In 1900 the Company exhibited their Lathes fitted with the Quick Change Gear Box at the Paris Exposition and received the gold medal.

The latter part of 1900 Hendey Standard received further recognition from the Government in an order from the Rock Island Arsenal, for 240 Lincoln Type Milling Machines. The order, completed the following year, was distinctly interesting and advantageous to the Company in that it was secured in direct competition. It was a new tool for The Hendey Machine Company, moreover, they were compelled to meet certain Arsenal requirements in the specifications. The order was an unqualified testimonial to the Company's reputation for making precision machine tools. Shortly thereafter the Lincoln Milling Machine as well as the Plain and Universal type were regularly manufactured and cataloged.

STANDARDIZING

The year 1900 saw the Company's product practically resolved into a standardized line of Lathes, Shapers and Milling Machines. The three years following the Quick Change Gear Box innovation had truly emphasized the fact that the Engine Lathe was to be the real medium of reflection for Hendey Standards, and the 1900 catalog for the first time listed Lathes and Shapers separately, indicating the importance attached to the former tool.

In marketing Milling Machines it is a significant fact that volume in sales was almost immediate. This was due first, to the Company's reputation for precision, accuracy, simplicity and flexibility of product already established through its other Machine Tools; second, to the Company's ability to offer on this machine, the Quick Change Gear Mechanism which had revolutionized the Engine Lathe field and placed the Hendey Lathe, to be modest, in an extremely enviable position.

The Friction Shaper first produced in 1875 had been a tremendous factor in building the Company's reputation. In 1915 the



THE SHAPER DEPARTMENT
PRESENT

development of the Crank Shaper with its greater speed, accuracy, and capacity, proved another and most important step forward. This machine embodied many noteworthy changes and improvements, the result of long study and experimentation, and added materially to the Company's reputation for accuracy and flexibility in machine tools.

The period of fourteen years between 1900 and the breaking of the World War, was, with The Hendey Machine Company, one of steady and consistent progress and expansion. From certain trials and vicissitudes of its earlier days, the Company had settled into the easy winning stride acquired through long training and fidelity to high standards—in short, running true to form. It is in no vainglorious spirit that the Founder's ideals are frequently referred to, for they have been and will continue to be the greatest contributing factor in the Company's success and position in the machine tool world.

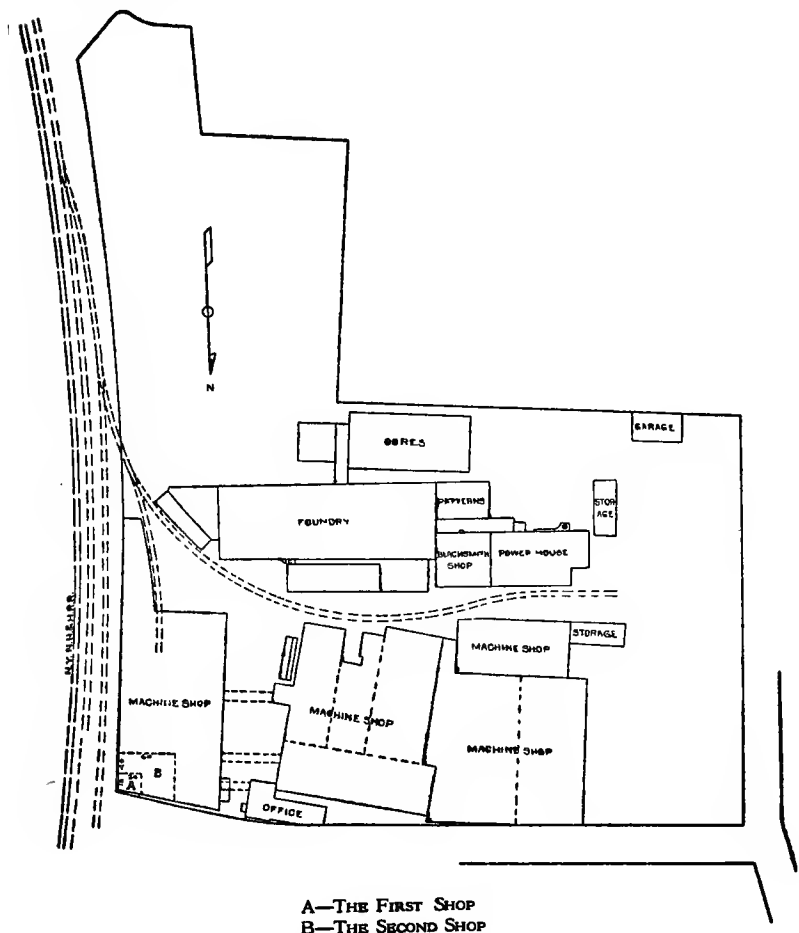
The increase and latitude in sales, both domestic and foreign, and the type of purchaser the more emphasized the necessity for precision, flexibility and utility in product. The Motor Drive was made more

practical, the Tie Bar Headstock, insuring greater rigidity, particularly in heavy duty work, was introduced, the New Combination Gear Box affording thirty-six feed changes without the removal or replacement of a gear, became a reality and the Geared Head Lathe and Geared Drive Milling Machine were added to the line. There was throughout this period constant study with a view to attaining even greater accuracy in the Hendey Precision Lead Screw, the soul of the Engine Lathe. These are a few of the innovations and betterments introduced during this period, not to mention numerous other refinements which were cumulative in their relation to the finished machine.

The growth in size and capacity of plant had been pronounced and, aside from many smaller additions, two large buildings were added; one in 1906, two-storied, for use as a Planer Division for the larger castings, the other in 1910, a four-story machine shop. The increase in plant ground area since inception may be visualized by the plot on the opposite page.

However conscientiously and constantly the Company's efforts are directed towards the perfecting of its product, there is always

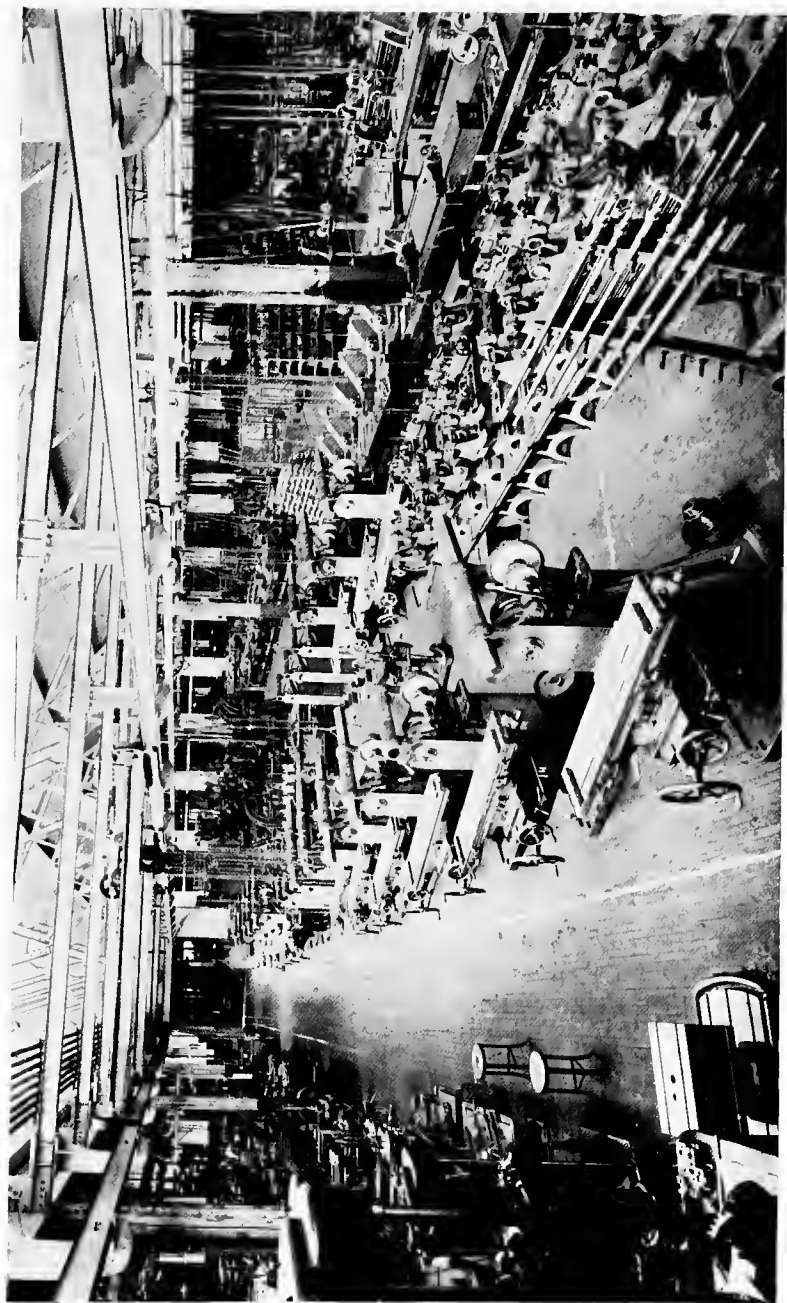
an increasing and stimulating demand from without. It is difficult indeed to specify which industrial type has created the greatest outside incentive, but the watchmaking,



electrical, precision instrument industries, together with the automotive with its immense production of interchangeable parts, have certainly been factors. The demand for accuracy is ever increasing, as evidenced during the early part of the war when our Government on certain Munition Gauges allowed a tolerance of but .0001 of an inch.

A chemical as well as physical test is made of all materials to be used in the Hendey product, and quite aside from the usual Division or Foreman inspection is the testing and research work conducted in the Company's Laboratory.

Constant research work, experimentation and development have been practically concentrated upon the three standardized machines—the Lathe, the Shaper, and the Milling Machine. That a Hendey machine is equipped to broadly meet present-day requirements is but a forceful reminder that it shall be further developed to meet the demands of the future.



THE MILLING MACHINE DEPARTMENT
PRESENT

EXPORT

During the first few years of the Company's existence the sale of its output was confined to the home market and very naturally no effort was made to establish foreign connections. The reputation for high standard in product had already spread beyond the confines of New England and the reward was apparent not alone in the healthy increase in business; but in its area of distribution.

As already cited, the Company's exhibit at the Centennial Exposition of 1876 had created no little interest and, judging from numerous inquiries from abroad, was far reaching. The latter part of the year saw a few foreign orders in hand, mostly of English origin, and the Company established its first foreign agency in London. This connection, pleasant and profitable and still maintained, suggested the wisdom of a general chain of Continental agencies, all of which were in successful operation when the great war came. In the establishing and conduct of these alliances the Company has aimed, as at home, to preach and practice Hendey Standard.

From 1892 until 1898 the subject of the Metric Lathe was rather indifferently considered by the Company and such machines as were required were individually fitted. With an increasing demand for this equipment, the Company in 1898 produced a purely Metric Lathe in which the Lead and Cross Feed Screws and Nose of Spindle were cut to metric scale and a metric gear box furnished, thus making it possible to produce all metric threads common to those countries using the system.

The general reputation of Hendey Standard abroad, the innovation of metric equipment and the widespread interest created by the Quick Change Gear Box exhibited at the Chicago Exposition in 1892 brought orders from the government arsenals of Europe. The accuracy and flexibility of the machine, coupled with its power and rigidity, attracted the better class of manufacturers and the sales increased until today, it is hardly an exaggeration to say there are few of the higher type of European works whose equipment does not include Hendey Lathes.

The export of the Company's product to the Orient has been heavy. In one in-

stance, two Hendey Lathes were shipped to Calcutta knocked down, transported inland to the terminus of the rail line and carried 400 miles to destination by Coolies.

South Africa imports Hendey Lathes and they are in use in the copper mines of Spain and South America. The Company's records show South American shipments knocked down, which in reaching their destination crossed the Andees by mule power.

The Company's export business during the World War in itself constitutes a story interesting and significant, not alone in point of volume, but rather in the actual performance of its tools under most exacting and in many cases abnormal requirements and demands for accuracy combined with production.

PATENTS AND THEIR PROGENY

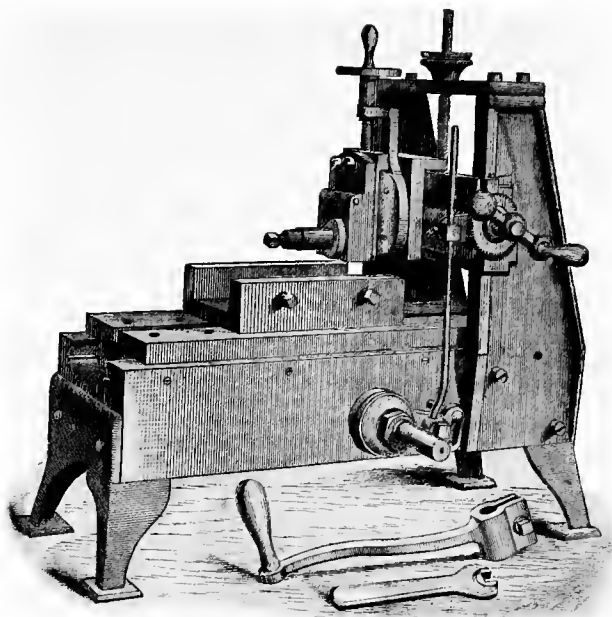
For some thirty years past the policy of the Company has been one of standardizing, the adoption of a basic line composed chiefly of the Lathe, the Shaper, and the Milling Machine. Throughout this period all possible concentration and study has been brought to bear upon original improvements, refinements, and betterments. Radical departure from the main line of accuracy, utility, and flexibility have been discouraged and the Company's efforts have been largely focused upon the development of the principles and improvements embodied in Letters Patent issued to Eli J. Manville, Wendell P. Norton, Constant Bouillon, and George H. Knight.

A patent, essentially a crystallized idea, is susceptible of development and progressive improvement. The Company's policy in this respect has been to market no betterment without a protracted period of practical experimentation, to the end that each refinement may in itself reflect Hendey Standard.

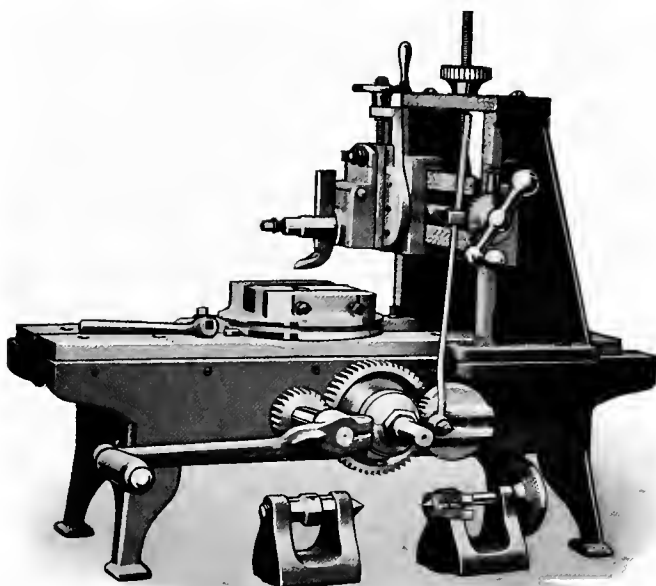


THE PRESIDENT'S OFFICE
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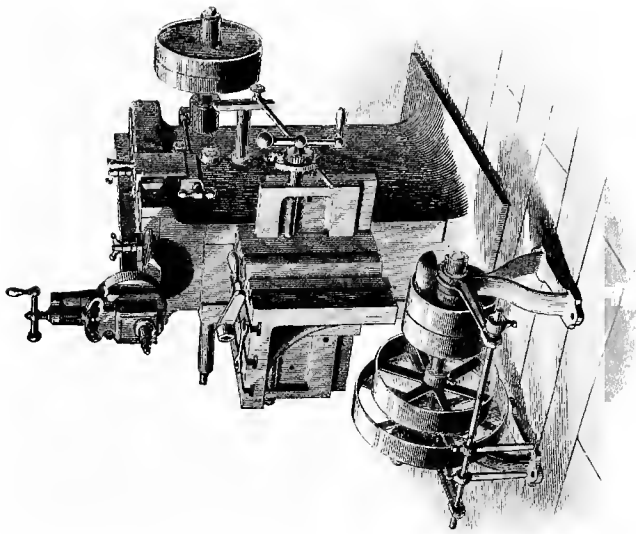
TYPES
PAST AND PRESENT



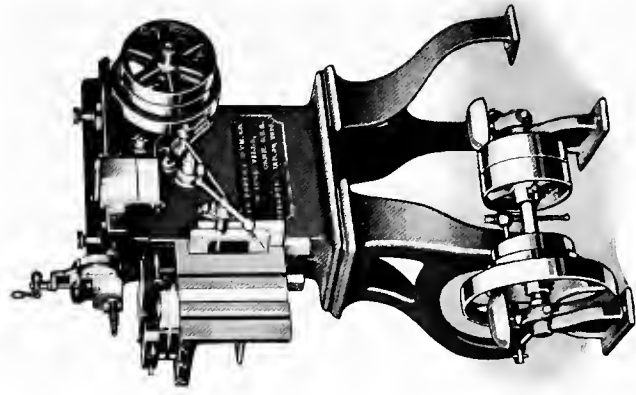
HAND PLANER—1870



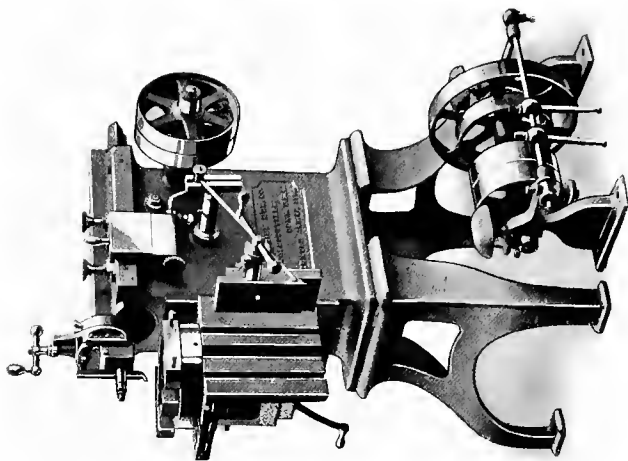
HAND PLANER—1873



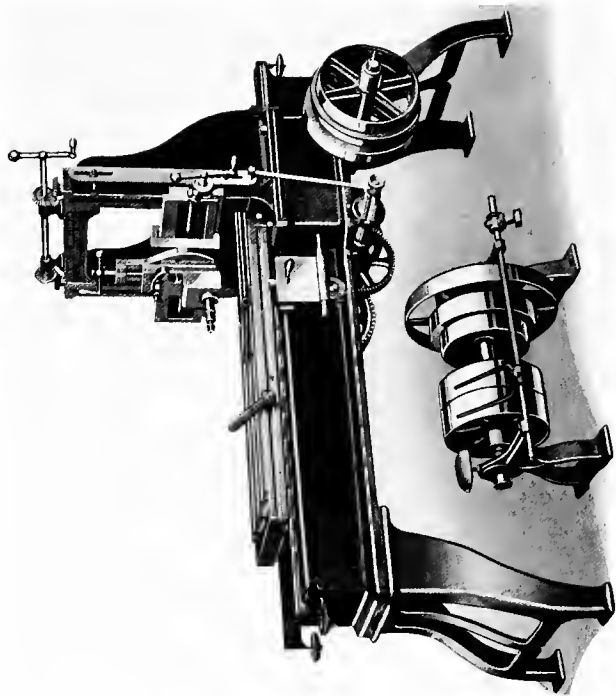
24" FRICTION SHAPER—1874



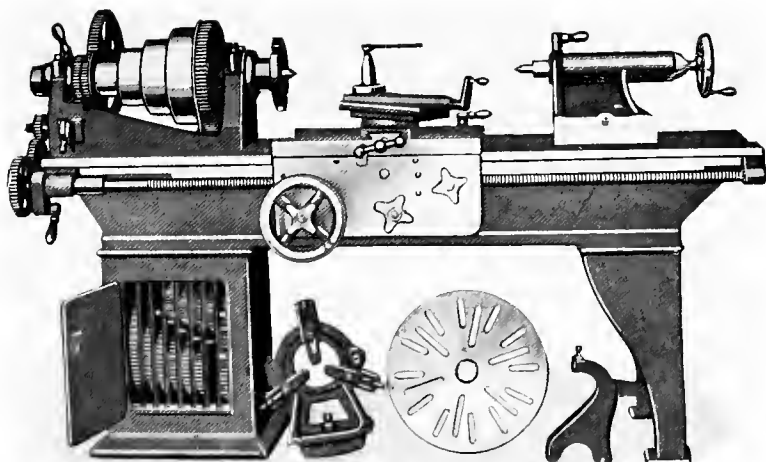
15" FRICTION SHAPER—1875



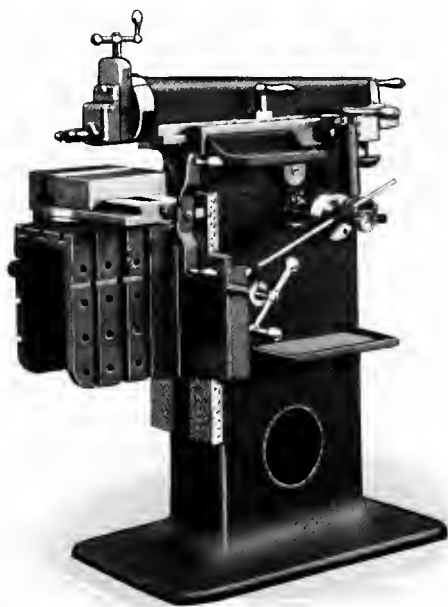
15" FRICTION SHAPER—1876



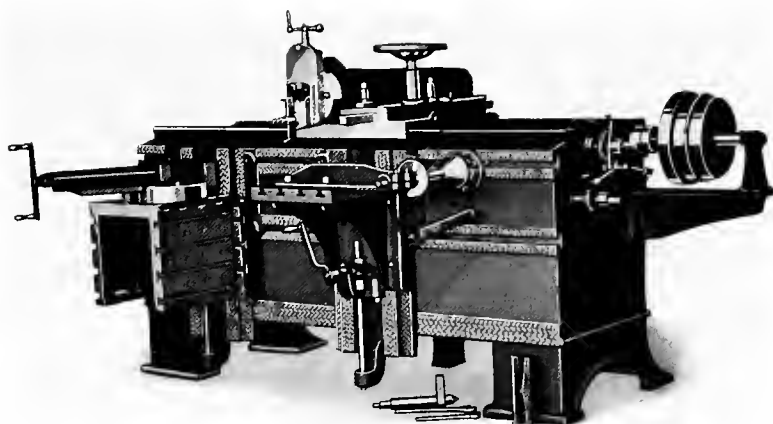
16" FRICTION PLANER—1877



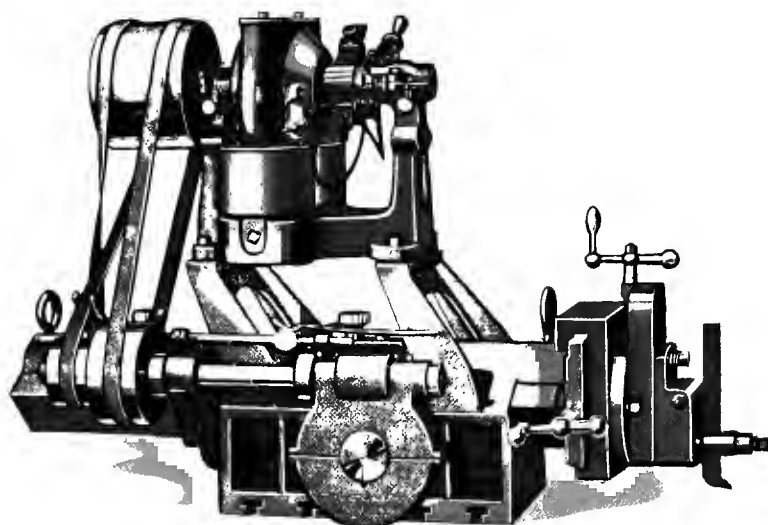
PLAIN ENGINE LATHE—1887



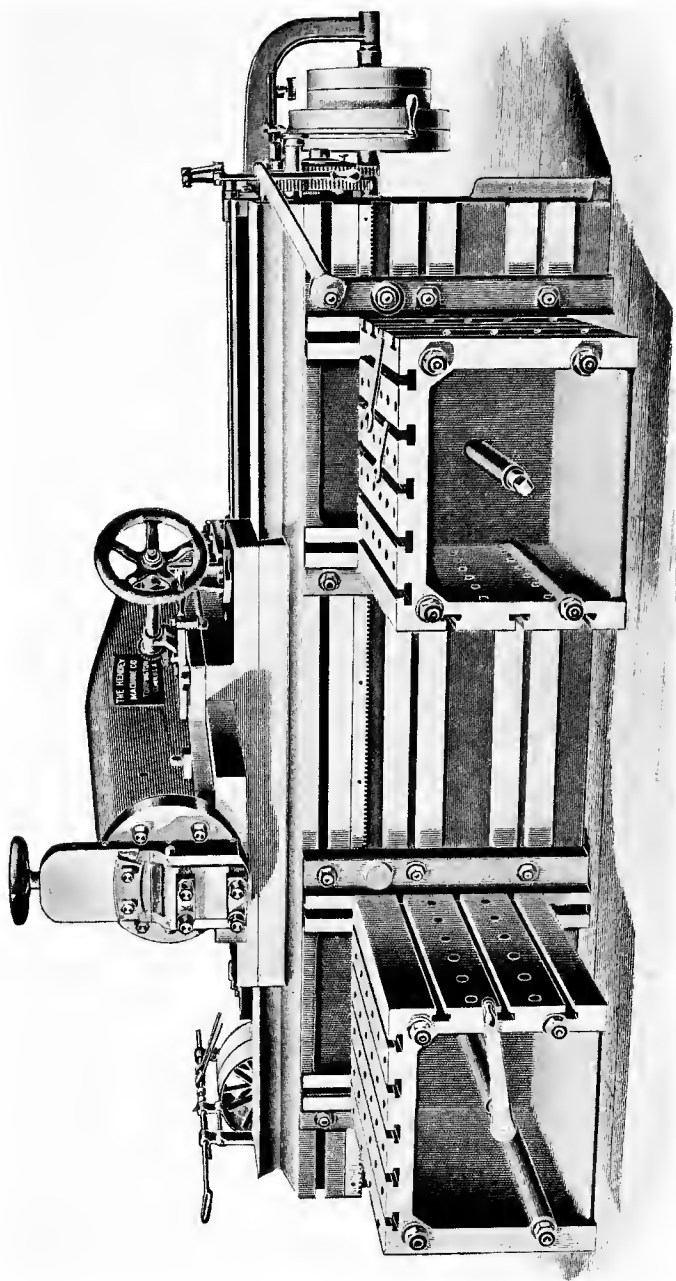
15" FRICTION SHAPER—1889



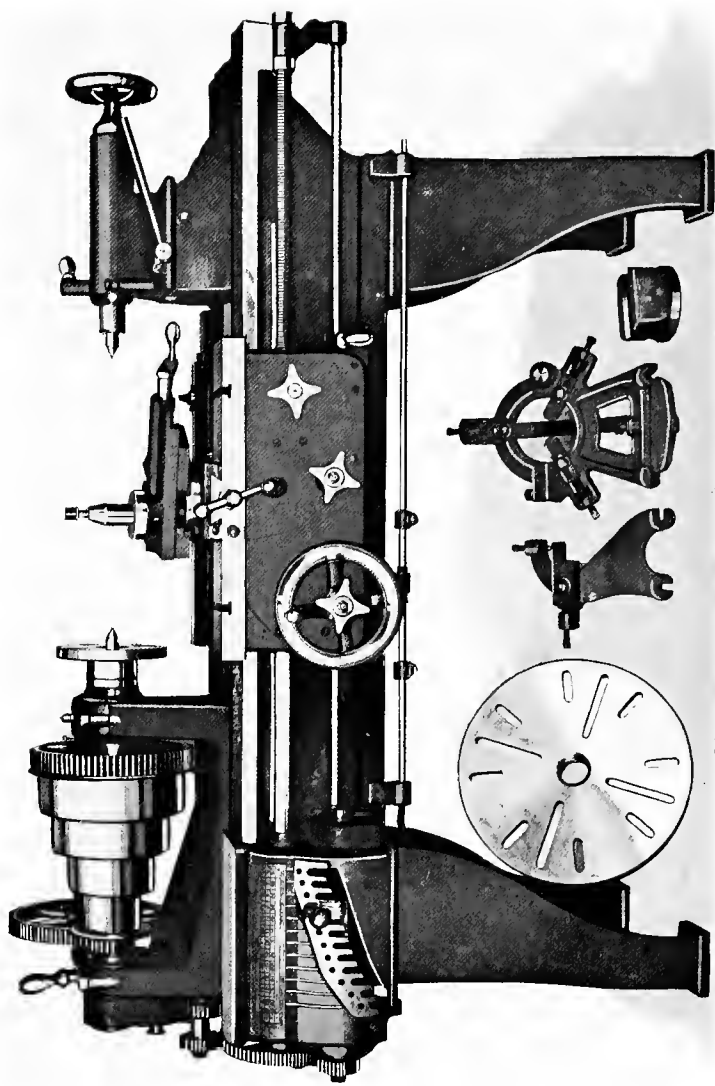
20" TRAVERSE SHAPER—1890



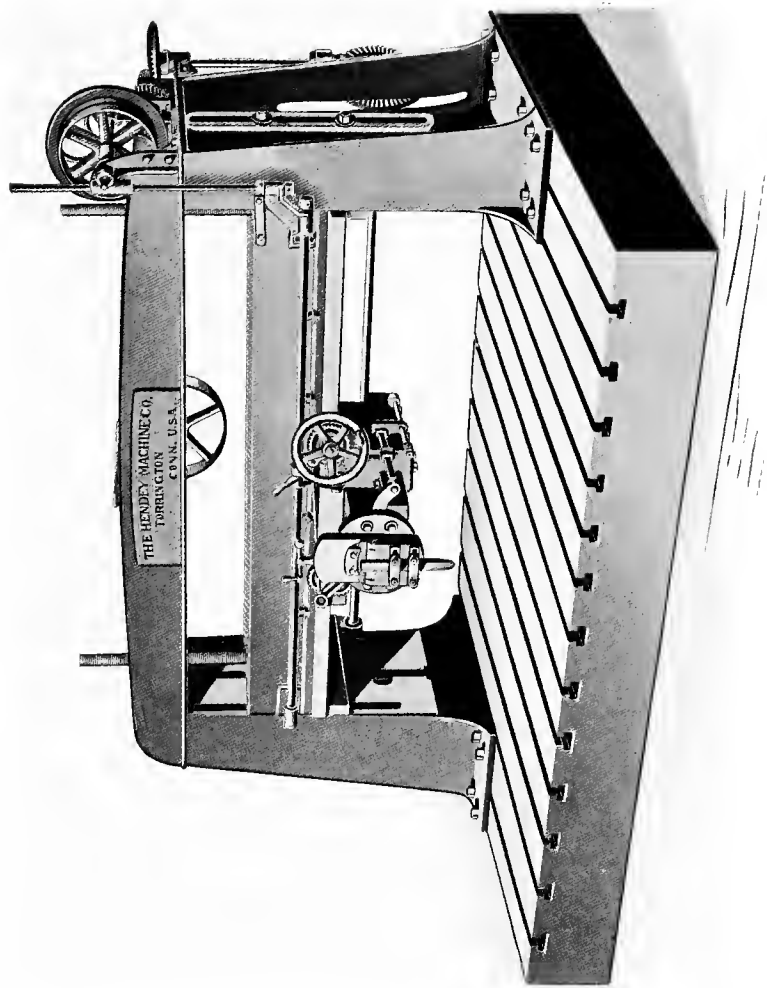
PORTABLE MOTOR DRIVEN SHAPER—1892



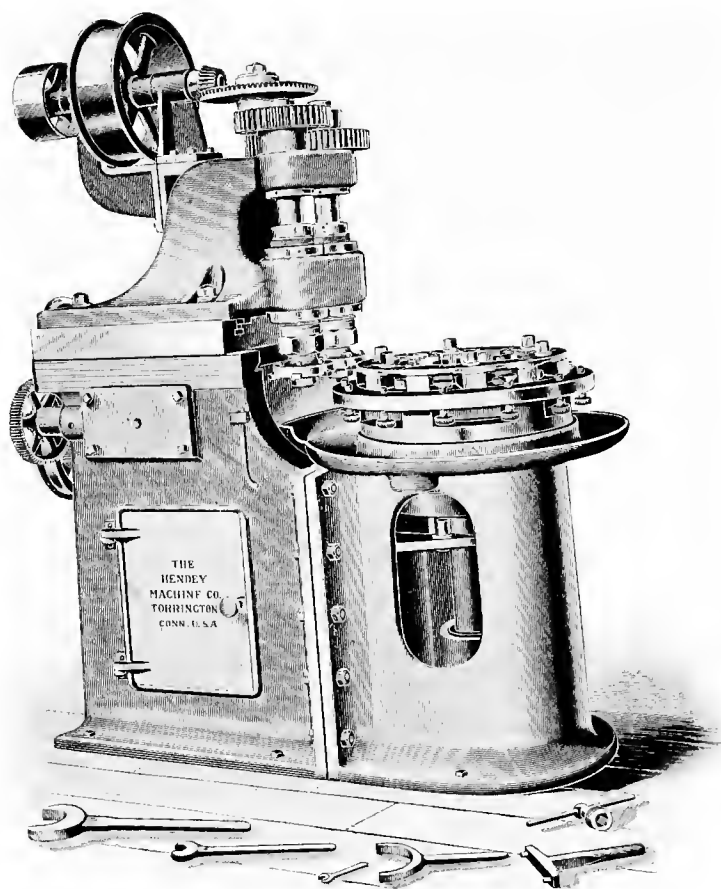
6' STROKE TRAVERSE SHAPER—1892



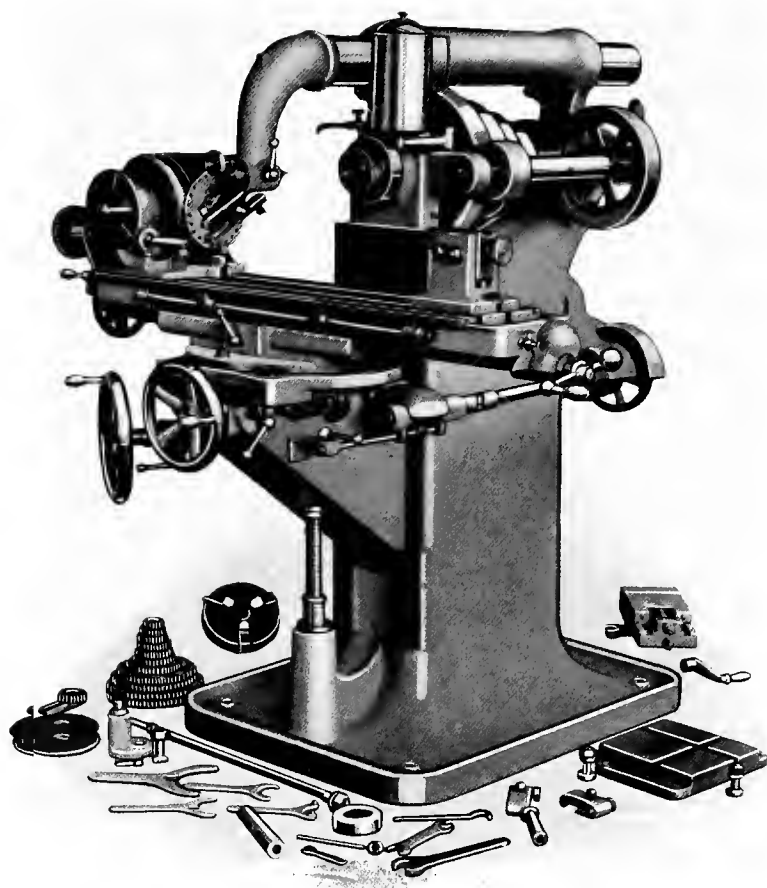
QUICK CHANGE GEAR LATHE—1892



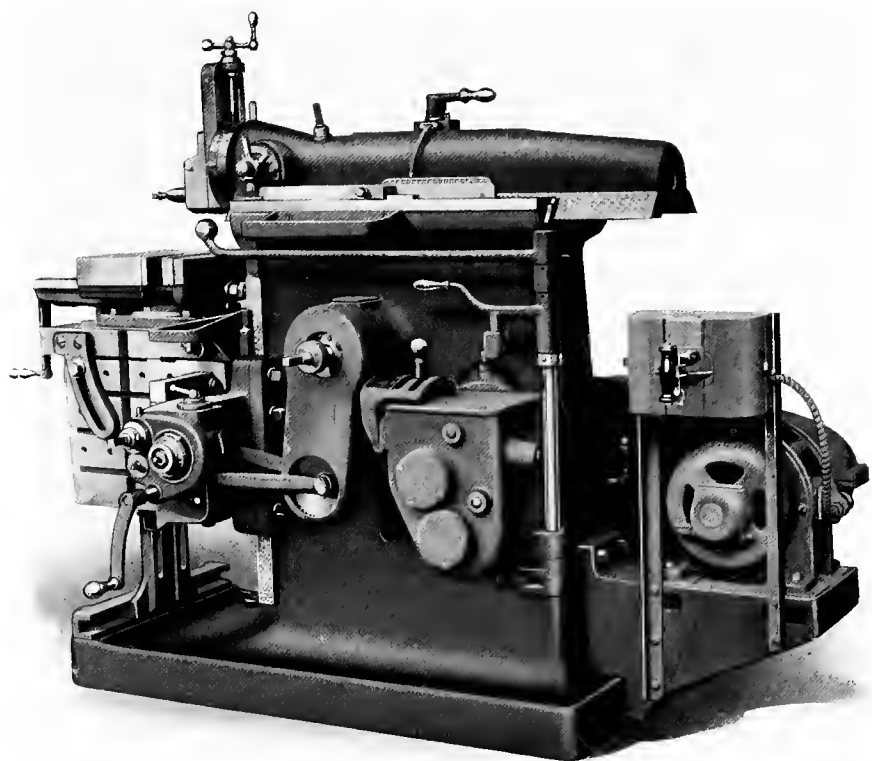
SUSPENSION SHAPER—1892



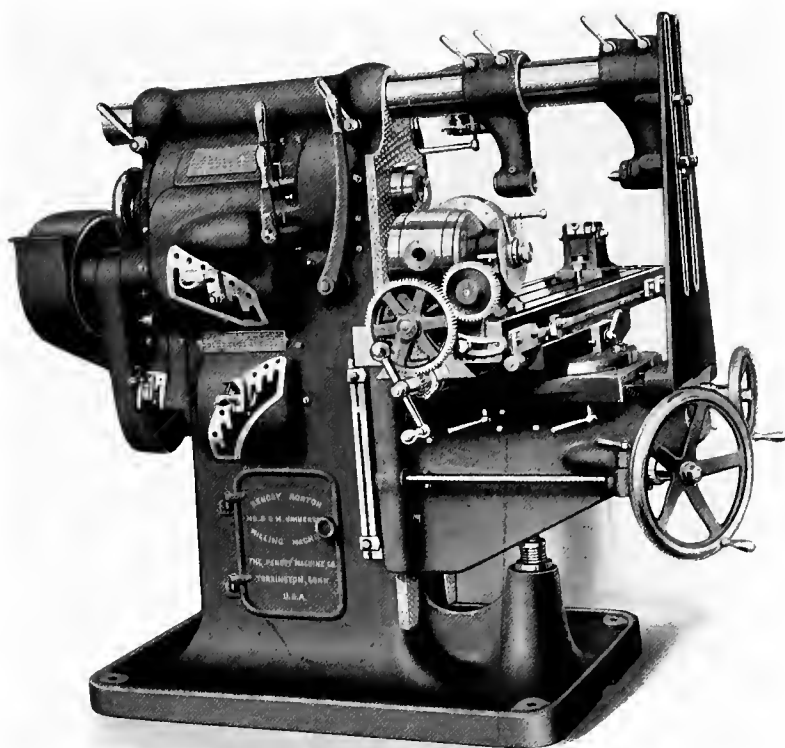
CONTINUOUS OPERATING MILLING MACHINE—1894



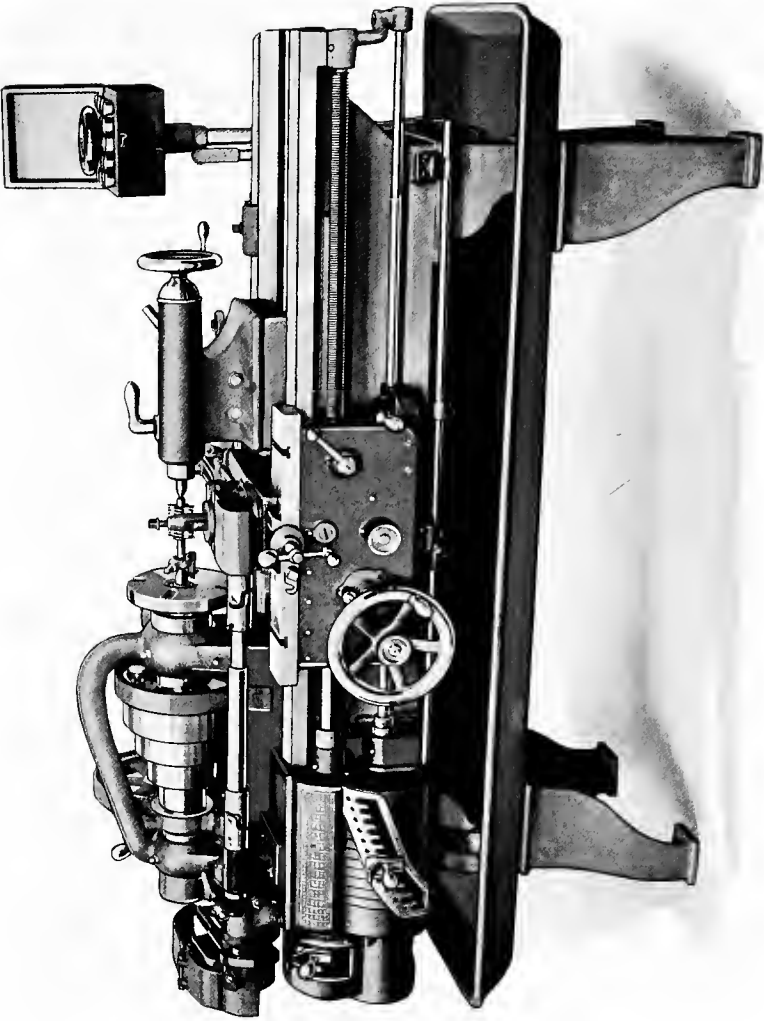
UNIVERSAL MILLING MACHINE—1900



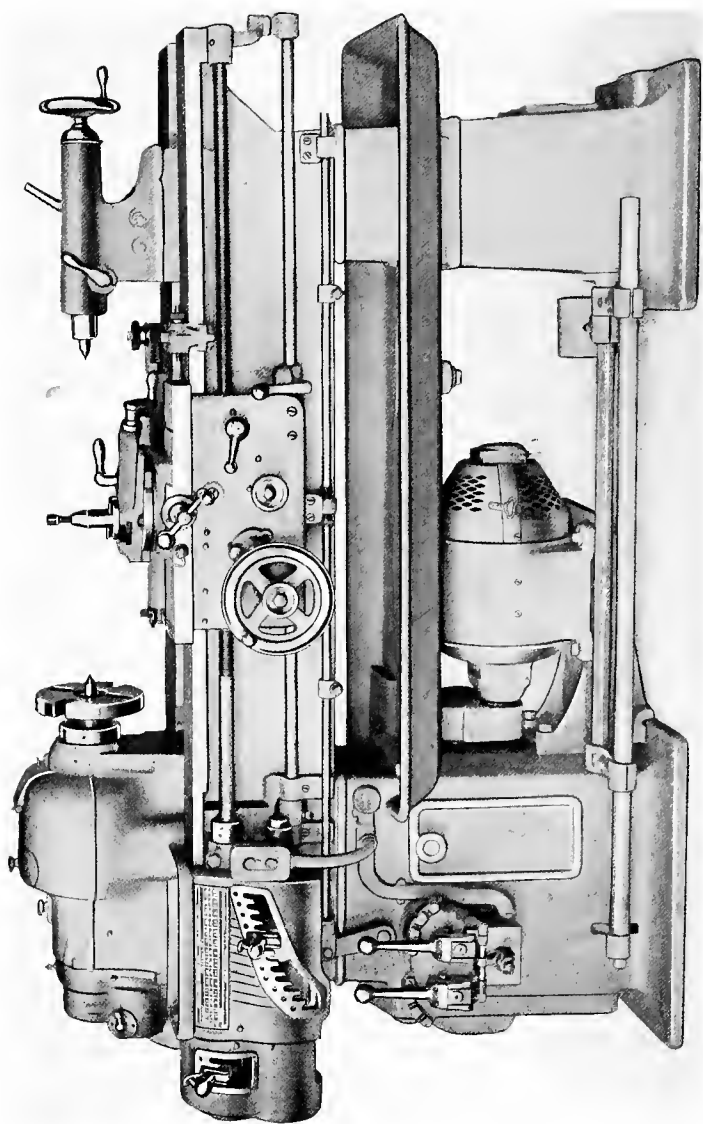
HENDEY MOTOR DRIVEN CRANK SHAPER—Present



HENDEY MILLING MACHINE—Present



HENNEY LATHE.—Present



1922 DESIGN

WAR AND PEACE

W A R

THE LIST OF HONOR

*Cavallara, J.

*Softski, A. W.

Albanio, A.	Fenske, F.	Meyer, A. J.
Amicone, E.	Folio, T.	Michiawicius, W.
Anderson, H.	Fournier, F.	Miller, J.
Anderson, O.	Fournier, V.	Mitchell, T.
Arapato, J.	Fuessenich, L. C.	Morgan, R. E.
Armstrong, S. M.	Geary, J. F.	Nelson, N. S.
Bagrie, Geo.	Godich, S.	Newman, E. F.
Bagrie, Wm.	Gonella, M.	Northrup, F. E.
Becher, Leon	Grohaski, K.	Olson, H.
Bonasera, S.	Gugnoni, P.	Oris, L.
Borinsky, W. F.	Haag, V. A.	Parmalee, H.
Bossone, E.	Hallahan, J.	Pillus, F.
Bouch, F. J.	Hanisko, M. J.	Pizze, T.
Brons, E.	Hosmer, E. C.	Pregno, W. T.
Brons, L. W.	Jacobs, E.	Raduzzio, A.
Callender, K.	Jacquot, E.	Raicch, J.
Casey, J.	Jarvis, E.	Reimer, B.
Chiron, A.	Jeanroy, A. E.	Riley, C.
Ciesco, A.	Kearney, W. F.	Rogo, J.
Claudido, N.	Kiskurno, M.	Rossi, A.
Clay, A.	Kononof, J.	Ruzbassan, J.
Clouser, C.	Lambert, A. J.	Sante, F.
Conti, L.	Lennihan, F.	Smith, C. M.
Cooper, C.	Levenberg, M.	Soliani, T.
Cornwell, C.	Liptak, J.	Trumpfeller, R.
Crenna, M.	Liskin, A.	Wallace, W.
Cunningham, J.	Lundon, M.	Watkins, B.
Didier, E.	McCarthy, K.	Wellnitz, W.
Dileo, R.	McDonald, W. H.	Williams, J. J.
Douyard, A.	Magyar, E.	Zack, J.
Dubourg, P.	Maniccia, T.	Zellic, N.
Eglesko, M.	Mannion, J.	Zorcky, J.
Fabwgkewicz, S.	Mathis, F.	

With our men who answered the Nation's call to arms, there is and will remain the satisfaction of a duty patriotically faced and honorably discharged. Those who made the supreme sacrifice are held in revered memory. They gave all that others might live, labor, and progress, that democracy might be perpetuated.

Shortly after the beginning of hostilities, it was evident that, in view of the great volume of very accurate machine tools required and demanded for an all too prompt delivery, the Company was facing a most perplexing problem, one of holding to standards and speeding up production to an unheard of extent.

Those who labored in the line and those who planned, devised, and contrived in the staff, realized only too well that no period of Hendey history had been more important. It was a question of maintaining the Founder's ideals and high standards, handicapped at every turn by limited time and labor shifts necessitated by the call to arms. It involved the most remarkable precision on much of the Government gauge work.

In no small measure was the result, now a matter of history, attributable to individual

loyalty and patriotism and many of our men, who had passed the fighting age, battled day and night with the problem of production coupled with the lack of time.

Probably the degree of success may be fairly measured by the fact that The Hendey Machine Company had no Government cancellations, notwithstanding deliveries were made long after the war was over.

With the higher type of machine tool builders there is yet the memory of a certain competition of the period, mushroom in growth, shoestring in stability, whose deliveries were rapid indeed, but the accuracy and precision of whose product was lacking. This reference is made, as undoubtedly there was a tremendous influence in this element. It constituted a sore temptation to produce volume and sacrifice quality. In this connection, the Company's product was accepted in the arsenal work of our allies ex inspection and so satisfactory did this procedure prove that the practice still stands.

Besides the increasing demand for tools producing munitions and war material, there was a constant call for the accurate refitting of old machines, which was undertaken and carried through with the regular work.

Notwithstanding the pressure of the period, research and development work was continued and numerous improvements appearing at present and which will shortly materialize, date back to the war-time period.

The first contracts for machines for munition work were received in September, 1914, and early October saw increasing demands from Great Britain. In November, American manufacturers, who had munition contracts, were placing orders and in December France made a heavy call, closely followed by Russia in January of 1915. From then on until the close of the war The Hendey Machine Company worked unremittingly day and night.

With the entry of the United States, the Company was indeed taxed in meeting the increasing demand, one always limited by rigid specifications and the necessity for almost immediate delivery. From this time until the termination of hostilities the plant's total production proceeded upon a priority basis.

Throughout the entire war period all machine tools and their parts were made in The Hendey Works, thus permitting careful

and uniform supervision of all materials used and local test and inspection of the finished product.

This period in retrospect, with its trials and tribulations, its complexities and responsibilities, sinks into comparative insignificance in the light of its achievement, for with plentiful excuses for deviating, the Company sailed the charted course of its Founder and with the loyal co-operation of its men collectively and individually upheld Hendey Standard.

PEACE

From the signing of the Armistice until the end of 1920, the half-century mark of The Hendey Machine Company's existence, its activities may be epitomized, for in common with other industries having a product of acknowledged high standard, all possible concentration was brought to bear upon maintaining this recognized excellence in the face of changed conditions and shifting values.

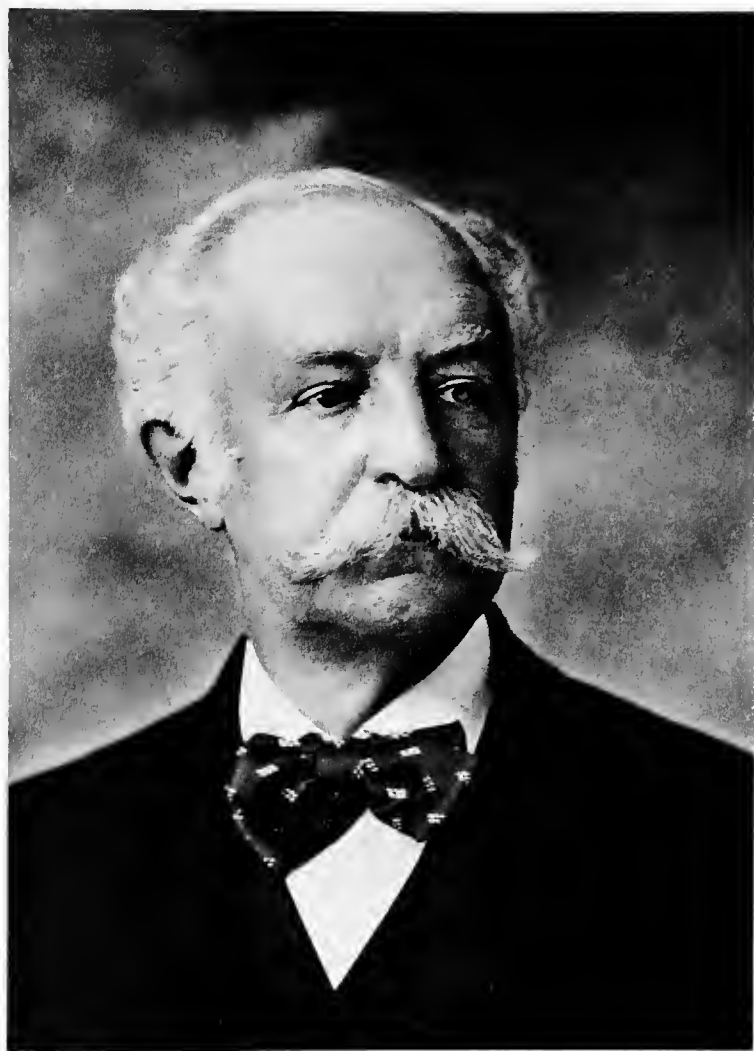
A new industrial period is dawning. The world's great tragedy is a yesterday. The faith of men sorely tried is bountifully rewarded in the victory of democracy. Socially, economically, and industrially we are facing forward towards an era of universal liberty: but—"Liberty is a chance to be unequal without privilege." This applies to the individual, the group, and the State alike.

Behind the present industrial inactivity is a faith, which again, however sorely tried, will as surely be rewarded, but only in the measure such faith is coupled with works.

Never in history has obligation and responsibility been vested more in the indi-

vidual. The laborer, the capitalist, the statesman, and the ruler in common, constitute today the great army of peace and prosperity, whose future victories shall be based upon the individual acceptance of those obligations and adjustments made necessary by the change in conditions, and which in their acceptance shall redound to the good of the great mass of the people. In this way and in no other will there be restored an enduring peace and a sound and sustained prosperity. It is the biggest job we have ever faced. It is not the nation's, nor the job of any community of interests. It is the job of every citizen.

THE PRESIDENTS



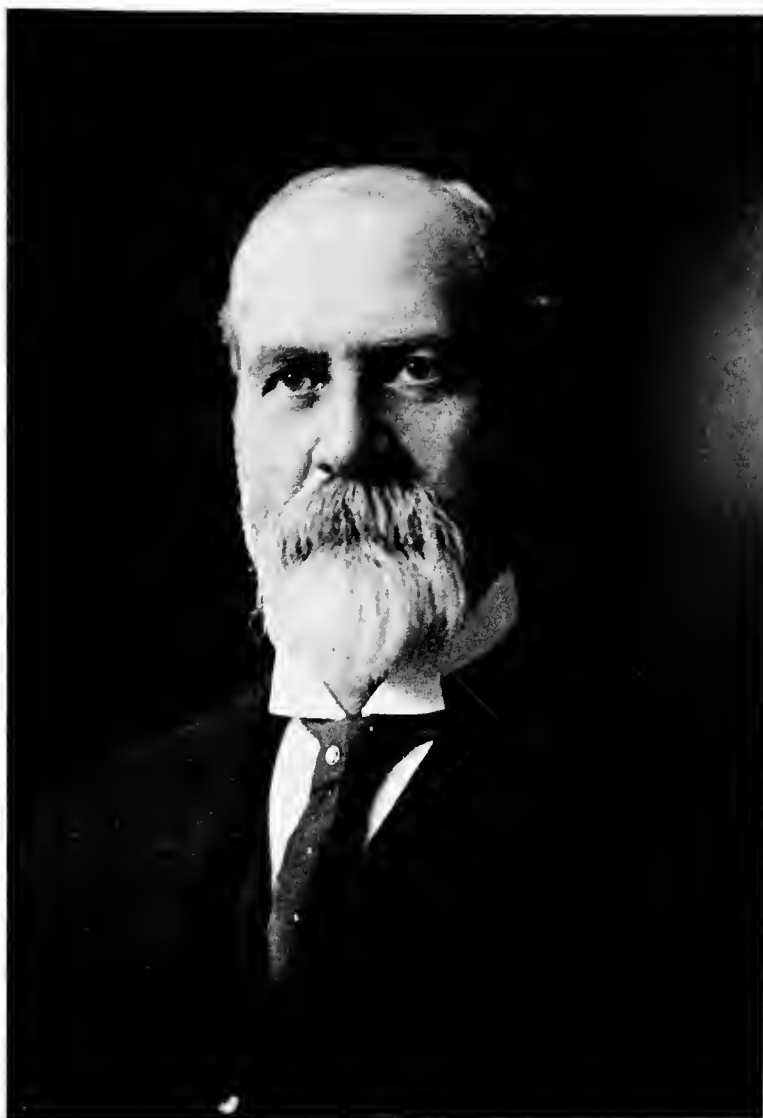
ACHILLE F. MIGEON



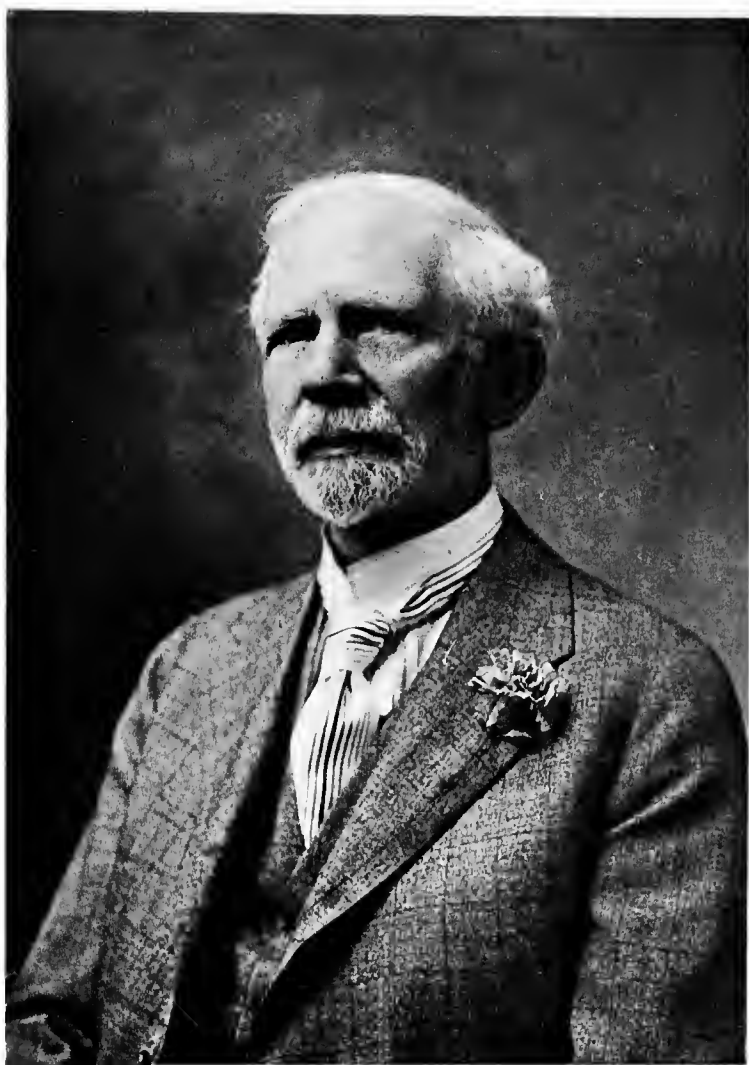
CHARLES F. BROOKER



CHARLES F. CHURCH



HENRY J. HENDEY



FREDERICK F. FUESSENICH



CHARLES H. ALVORD

THE OFFICIALS OF THE HENDEY MACHINE COMPANY 1870-1920

PRESIDENT

ACHILLE F. MIGEON, 1874-1875
CHARLES F. BROOKER, 1876-1877
CHARLES F. CHURCH, 1877-1883
HENRY J. HENDEY, 1883-1906
FREDERICK F. FUESSENICH, 1907-1919
CHARLES H. ALVORD, 1919-

VICE-PRESIDENT

CHARLES H. ALVORD, 1907-1919 ROBERT C. SWAYZE, 1919-

SECRETARY

HENRY J. HENDEY, 1874-1883
FREDERICK F. FUESSENICH, 1883-1899
CHARLES H. ALVORD, 1900-1906
FREDERICK N. MCKENZIE, 1907-

TREASURER

HENRY J. HENDEY, 1874-1876
CHARLES F. CHURCH, 1877-1883
HENRY J. HENDEY, 1883-1891
FREDERICK F. FUESSENICH, 1892-1918
CHARLES H. ALVORD, 1919-

ASSISTANT SECRETARY

JOHN JACK, 1916-1920

ASSISTANT TREASURER

FREDERICK W. FUESSENICH, 1911-

DIRECTORS

HENRY J. HENDEY, 1874-1906
ACHILLE F. MIGEON, 1874-1903
LYMAN W. COE, 1874-1877
CHARLES ALVORD, 1874-1875
CHARLES F. BROOKER, 1874-1877
ELISHA TURNER, 1875-1877
FREDERICK F. FUESSENICH, 1877-
CHARLES F. CHURCH, 1877-1883
JOHN C. HENDEY, 1878-1883
THEODORE HARTMAN, 1884-1890

JOHN SPITTLE, 1884-1885
EDWARD C. LEWIS, 1885-1901
JAMES S. ELTON, 1890-1902
CHARLES H. ALVORD, 1902-
WILLIAM E. FULTON, 1902-
ROBERT C. SWAYZE, 1907-
TRUMAN S. LEWIS, 1907-1919
W. SHIRLEY FULTON, 1920-
FREDERICK W. FUESSENICH, 1920-
CHARLES S. PALMER, 1920-

IN CONCLUSION

Of Mr. Hendey's vision, those of his contemporaries whose relations were personal and intimate, affirm that it was a dream of attainment, not of the mere machine; of a result, rather than of a device; a better and higher attainment, a more consequential result than is incident to ordinary daily routine.

To this end the machine must in plan and design be the concept of a master mind; its many co-ordinating and reciprocating parts of the best materials; assembled by artisans laboring in a wholesome environment, inspired by co-operative supervision; artisans whose very pride is expressed in a better product. In this wise does a machine resolve itself into a successful method and the method into a crowning achievement.

Such a commitment is indeed more than an idle expression. It is our heritage. Upon such precepts and practice the very life of the arts and manufactures endures. So in the midst of the workaday life it is not amiss to pause, to look within, realizing that success is the better assured through the combining of the practical and ideal as exemplified by Henry John Hendey.



THE HENDEY MACHINE COMPANY

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